

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A copper alloy comprising:
2.0 to 4.0 mass% of Ti; and
0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and P as ~~a third element group~~; an additional element; and
second-phase particles formed of Cu, Ti and the additional element;
wherein not less than 50% of the total content of the ~~third element group~~ additional element exists as ~~a the~~ a second-phase particle.
2. (Currently Amended) A copper alloy comprising:
2.0 to 4.0 mass% of Ti;
0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and P as ~~a third element group~~ an additional element; and
~~a second-phase particles particle with not less than 0.01 μm^2 area observed by a cross section speculum~~ formed of Cu, Ti and the additional element;
wherein the second-phase particles have not less than 0.01 μm^2 area observed by a cross section speculum, and the rate of the number of second-phase particles in which the content of the ~~third element group~~ additional element within the second-phase particles is not less than 10 times the content of the ~~third element group~~ additional element within the alloy is not less than 70% of the total number of the second-phase ~~partiele~~ particles.
3. (Currently Amended) A copper alloy comprising:
2.0 to 4.0 mass% of Ti;
0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and P as ~~a third element group~~ an additional element; and

a second-phase particle ~~with not less than $0.01 \mu\text{m}^2$ area observed by a cross section~~
speculum formed of Cu, Ti and the additional element;

wherein the second-phase particle has not less than $0.01 \mu\text{m}^2$ area observed by a cross
section speculum, and the second-phase particle has an area percentage Af of not more than
1.0%.

4. (Currently Amended) A copper alloy comprising:

2.0 to 4.0 mass% of Ti;

0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and

P ~~as a third element group~~ an additional element;

a second-phase ~~particles~~ ~~particle with~~ formed of Cu, Ti and the additional element,
wherein the second-phase particles have not less than $0.01 \mu\text{m}^2$ area observed by a cross
section speculum; and

an equable dispersion degree E defined by the following equation

$$E = \frac{\sqrt{\frac{1}{n} \sum_i^n (d_i - \sqrt{A_0/N_A})^2}}{\sqrt{\frac{A_0}{N_A}}}$$

wherein d_i is the distance from ~~the~~ an i-th second-phase particle to ~~the~~ a nearest second-phase
particle, A_0 is the measured visual field area, and N_A is the number of the second-phase
~~particle~~ particles confirmed within the measured visual field area, wherein the equable
dispersion degree E is not more than 0.8.

5. (Currently Amended) A copper alloy comprising:

2.0 to 4.0 mass% of Ti;

0.01 to 0.50 mass% of at least one element selected from Fe, Co, Ni, Cr, V, Zr, B, and

P ~~as a third element group~~ an additional element;

an area percentage Af of a second-phase ~~particles~~ particle with not less than 0.01 μm^2
~~area observed by a cross section speculum~~ formed of Cu, Ti and the additional element,
 wherein the second-phase particles have not less than 0.01 μm^2 area observed by a cross
section speculum, and the area percentage Af is not more than 1.0%;

~~a~~ the second-phase ~~particle~~ particles with not less than 0.01 μm^2 area observed by the
 cross section speculum; and

an equable dispersion degree E defined by the following equation

$$E = \frac{\sqrt{\frac{1}{n} \sum_i^n (d_i - \sqrt{A_0/N_A})^2}}{\sqrt{\frac{A_0}{N_A}}}$$

wherein d_i is the distance from ~~the~~ an i-th second-phase particle to ~~the~~ a nearest second-phase
 particle, A_0 is the measured visual field area, and N_A is the number of the second-phase
~~particle~~ particles confirmed within the measured visual field area, wherein the equable
 dispersion degree E is not more than 0.8.

6. (Original) The copper alloy according to claim 1, wherein the content of the
 Ti is 2.5 to 3.5 mass%.

7. (Withdrawn) A producing method for the copper alloy of claim 1 comprising
 the steps of:

producing an ingot in which 0.01 to 0.50 mass% of at least one element selected
 from Fe, Co, Ni, Cr, V, Zr, B, and P is added to Cu, and 2.0 to 4.0 mass% of Ti is added;

solution treating for heating the ingot up to ultimate temperature $T^\circ\text{C}$, the ingot
 heated to temperature exceeding 600°C at a heating rate of not less than $20^\circ\text{C}/\text{sec}$, and the
 ingot is then held for not less than 10 sec within a temperature range of $T-100^\circ\text{C}$ to $T^\circ\text{C}$,
 resulting in a supersaturated solid solution;

cold rolling by applying cold rolling with 5 to 50% of degree of processing from conditions of the supersaturated solid solution; and

aging treating for applying a thermal treatment to the rolled material at 350 to 450°C.